

Illegal drugs and addiction

Approved July 2012*

National policy

1. The New Zealand Medical Association (NZMA) supports the current New Zealand National Drug Policy and its goal to prevent and reduce the health, social and economic harms that are linked to tobacco, alcohol, illegal and other drug use.
2. The NZMA supports the recommendations made by the New Zealand Law Commission in its review of the Misuse of Drugs Act 1975. In particular the NZMA would like to see drug courts piloted in New Zealand.
3. The NZMA believes that national policy frameworks provide an essential foundation for modifying or developing new strategies to minimise the adverse health, social and economic impacts of harmful illicit drug use.
4. The NZMA believes that effective prevention of harmful substance use needs to focus on social determinants and multiple risk and protective factors. Policies that will reduce economic and social inequality may reduce some of the risk factors associated with patterns of drug misuse and addiction. Further:
 - the media has a clear role in prevention, particularly in educating the public and influencing social norms and public opinion
 - prevention strategies should aim to prevent both uptake of substance use and progression to harmful substance use
 - in order to reduce the health and social consequences arising from illegal drug use, public policy should provide for generic programmes, such as life skills, aimed at young people.
5. The NZMA calls for demand reduction interventions to include a developmental approach at each stage of child and adolescent development, reinforcing positive protective factors such as good housing, education and employment, and promoting early intervention for risk factors predictive of later illicit drug use.
6. The NZMA notes that HIV and other blood-borne infections (such as Hepatitis C) are serious potential complications of injecting drug use for drug users and non-drug users alike. Policies for illicit drugs should take into account whether they will assist or hinder efforts to control the spread of these blood-borne infections.
7. The NZMA advocates for integration of mental health and substance dependence/abuse recovery and general health services for persons experiencing co-occurring interactive disorders regardless of service delivery setting.
8. The NZMA calls for responses to dependence to cover the spectrum of prevention, diagnosis, treatment and rehabilitation. Given that many harmful dependencies are progressive in nature, early detection and early intervention is important. Interventions need to be matched for the severity of a person's dependence.

* In April 2019, statements about pill testing were added.

9. The NZMA encourages consideration of a model similar to that for smoking that separates the impact of the dependency between its owner and the family/society where individuals are supported to reduce or cease their harmful dependencies while simultaneously ensuring that the dependency does not impact negatively on others.

The health/criminal divide

10. The NZMA believes that the Government must re-define illicit drugs primarily as a health and social issue, with funding for health and social interventions increased to the same level as that for law enforcement.
11. The NZMA believes that addiction should be regarded as a disease. Therefore, individuals suffering with drug dependency should be diverted, whenever possible, from the criminal justice system to treatment and rehabilitation.

Harm minimisation

12. The NZMA notes that there is no perfect solution to the problems resulting from illicit drug use and that, therefore, New Zealand needs to support ongoing activities that identify and adopt solutions that create the least harm in the community and, in particular, those strategies that reduce the supply of and demand for drugs. The NZMA also acknowledges that eradication of all drug use is unlikely and that while for some people abstinence will be an appropriate goal, for other people reduction in the use or behaviour is more feasible as a means of reducing harm.
13. The NZMA calls for the Government to provide sufficient funding to allow harm minimisation interventions to be expanded to meet public health need.
14. The NZMA supports innovative community-based trials that take into account the broader context of the needs and problems facing communities and or population sub-groups (e.g. employment status, health status (including mental health), homelessness, isolation, recreation opportunities, cultural considerations, family support, community development and access to services). The NZMA supports carefully designed pill testing trials at festivals. Pill testing within these trials should be conducted in purpose-designed facilities by appropriately qualified technical specialists and should be accompanied by appropriate advice and information to allow people to make informed choices.

Treatment

15. The NZMA believes that responses to illicit drug use need to cover prevention, identification, diagnosis, treatment and rehabilitation.
16. The NZMA notes that most people with substance use problems do not attend specialist alcohol and other drug agencies. Consequently, competencies in treating substance use problems need to be widely available among medical practitioners and other health professionals. They also need to be evidence-based and implemented using standard scientific methodology.

17. The NZMA believes that treatment approaches should consider the needs and engagement of other family members, including children, to improve outcomes for all those affected by an individual's problematic alcohol or other drug use.
18. The NZMA calls on government to fund research into the best treatment methods, including the development of possible suitable pharmacotherapies, for those who are dependent on illicit drugs or those who wish to reduce or cease their use.
19. The NZMA calls for psychological and pharmaceutical evidence-based treatments to be available for those who wish to decrease or cease their use of illicit drugs.
20. The NZMA supports the involvement of consumers of mental health and substance dependence/abuse services in the planning, implementation and evaluation of early identification and intervention, treatment, and recovery support services for mental health conditions, substance dependence/abuse conditions, and co-occurring interactive disorders.

Medical practitioners

21. The NZMA believes that doctors have an important role in educating people about illicit drug use and supporting those with problems associated with it. The NZMA calls for better links between primary care and specialist mental health and drug and alcohol services. There is a need to reduce barriers and improve services for those seeking treatment for problems associated with illicit drug use.
22. The NZMA believes that medical practitioners should be aware of patterns of substance dependency, including polysubstance abuse with or without alcohol. Appropriate information regarding such misuse should be available to patients. Medical practitioners should familiarise themselves with the signs, symptoms and emergency treatment of users of illicit substances.
23. The NZMA notes that general practitioners are the preferred first point of contact for most drug users, the vast majority of whom are neither in contact with the police nor with specialist drug agencies. There should therefore be a sustained investment in the training of general practitioners on how best to engage drug users and in the application of evidence-based brief motivational interventions that have been demonstrated to lead to positive lifestyle changes and a reduction in drug related harm. General Practitioners also need to have a range of options for referral of illegal drug users.
24. The NZMA urges that emergency department staffing include a specialist drugs liaison officer to be available to engage and support those presenting with drug related problems.

Education

25. The NZMA believes that users of illicit substances need information on the adverse psychological and physical outcomes associated with their use. Where appropriate this information should include advice on prevention of disease transmission and how to reduce the probability and severity of complications. Education on the physical, family and social consequences of continuing dependence should be provided to users.

26. The NZMA believes that young people in particular have specific information and education needs in the area of substances and behaviours. There are school-based life skills programmes that are evidence-based for effectiveness at preventing or reducing substance use. No child should be denied access to such programmes.
27. The NZMA supports a comprehensive and sustained public education programme on the health and social consequences of illegal drug use.

Research

28. The NZMA supports research, from both a genetic and socioeconomic perspective, to identify those young people most at risk of drug induced psychosis and the efforts that can be made to reduce that risk.
29. The NZMA calls for more research into the methods of education about substance abuse, and into the evaluation of those methods. Current data on the causes, extent and effects of substance abuse in New Zealand and steps should be undertaken to acquire the necessary data.
30. The NZMA notes that there is a need for research studies that focus on social, cultural and economic determinants of drug use. Areas for further research include:
 - the influence of peers in the transition from drug use to abuse
 - greater specificity of familial effects; protective factors
 - ethnographic contexts of drug use
 - the interaction of illicit drug use and child abuse
 - the influence of the media, fashions and fads on recreational and dependent drug use
 - impact of law enforcement on harms and the illicit drug market
 - how to shape markets that produce the least adverse health effects
 - multidisciplinary studies on the variables – biological, contextual and social – associated with drug use.
31. The NZMA advocates for rigorous research and evaluation of implementation strategies to support evidence-informed policy making and assess the cost effectiveness of proven interventions.

Appendix 1

Background information in support of position statement

Drug use for recreational purposes is relatively common in New Zealand. The report prepared by the Ministry of Health “Drug Use in New Zealand; Key Results of the 2007/08 New Zealand Alcohol and Drug Survey²” is illuminating. While it is important to remember that the report is based on self reported data, the survey found that one in six (16.6%) people aged 16–64 years admitted having used drugs (excluding alcohol, tobacco and BZP party pills) recreationally in the past year, representing almost half a million (438,200) New Zealanders aged 16–64 years. The majority of these people had used cannabis, with 14.6% of all New Zealanders aged 16–64 years having used cannabis in the previous year.

Of those about one in five past-year drug users (18.6%) reported having experienced any harmful effect in the past year due to their drug use. Among past-year drug users, the most commonly reported harmful effects due to their drug use in the past year were on financial position (10.8%), friendships or social life (8.5%) and home life (8.4%). Furthermore, 7.2% of past-year drug users reported having had one or more days off work or school in the past year due to their drug use³.

Overall, the report concluded that the results of this study showed that drug use is a substantial health issue in New Zealand.

There are a range of illegal drugs in New Zealand, and include methamphetamine in its pure form (“P” if New Zealand made; “ice” or “crystal meth” if imported), heroin and “homebake” (New Zealand made opiate), GHB (“Fantasy”); cocaine, and lesser strength amphetamine-like drugs such as MDMA (“Ecstasy”), non-prescribed Ritalin and some party drugs (BZP) which were made illegal in April 2008⁴.

As noted above, cannabis is an illegal drug. It is not however covered in this statement specifically as the NZMA has developed a separate position statement on this.

Risk factors for illicit drug use

There are a range of health risk behaviours with common social determinants and shared risk and protective factors, one of which is illicit drug use.⁵ Social disadvantage and material deprivation are clearly linked to health damaging behaviours including tobacco use, alcohol abuse and illicit drug use.⁶ Although these macro level influences exist, a range of modifiable risk and protective factors may mediate the relationship between social disadvantage and drug use and drug-related harm, along with other outcomes. Social disadvantage, social isolation and marginalisation are strong

² Published January 2010

³ Above n1

⁴ Abacus http://www.acts.co.nz/Art_Methamphetamine_P_illegal_drugs.php

⁵ VicHealth Position Paper – Illicit Drugs. July 2006: The National Drug Research Institute and the Centre for Adolescent Health. 2004. “The Prevention of Substance Use, Risk and Harm in Australia - a Review of the Evidence: Summary.” Canberra: Commonwealth of Australia.

[http://www.health.gov.au/internet/wcms/publishing.nsf/Content/health-publth-publicat-document-mono_prevention-cnt.htm/\\$FILE/prevention_summary.pdf](http://www.health.gov.au/internet/wcms/publishing.nsf/Content/health-publth-publicat-document-mono_prevention-cnt.htm/$FILE/prevention_summary.pdf)

Spooner C, Hall W and Lynskey M. 2001. “Structural Determinants of Youth Drug Use”. National Drug and Alcohol Research Centre.: http://www.ancd.org.au/publications/pdf/rp2_youth_drug_use.pdf

⁶ Above n 4

predictors for drug use while contexts that facilitate social bonding, such as strong family attachments and/or belonging to social, sporting or other interest groups, are known protective factors. Risk factors associated with drug use in young people include personality and peer influences e.g. aggressive or problem behaviours, association with friends who are using drugs, family influences (e.g. family conflict, family impoverishment and family history of drug abuse), school influences (e.g. academic failure, lack of attachment or commitment to school and persistent problem behaviours in school) and community influences (e.g. drug laws and regulations, community attitudes, living in a neighbourhood which is poor or has high crime levels, and availability of drugs in the community)⁷.

Protective factors which may reduce risk of drug use in young people include attachment to family, parental harmony, having a sense of belonging and fitting in at school, positive experiences and achievements at school, having someone outside the family who believes in them, contributing to their school and community, and feeling loved and respected⁸. In respect of the social determinants of health and how this may impact on illicit drug use, the NZMA published in 2011 its position statement on “Health Equity”. A copy of this statement can be found at http://www.nzma.org.nz/sites/all/files/ps_healthequity.pdf.

Effects of illicit drug use

While illicit drugs cause pleasurable highs in the short term, the side effects and long term repercussions are serious and outweigh the highs. Depending on the drug taken these can include confusion, anxiety, depression, paranoia, psychosis, dependency, addiction and even death⁹.

In addition to the above harms there is also a strong – albeit complex – correlation between illicit drug use and suicide. This is dealt with further below.

Users of illicit drugs also commonly suffer both socially and economically from use. The 2007/8 survey on drug use in New Zealand found that of those who took part in the survey and reported on their drug use, the most common harmful effect for them was on their financial position (10.8%), friendships or social life (8.5%) and home life (8.4%)¹⁰.

In respect of methamphetamine the New Zealand Police report that the quick development of tolerance for the drug leads to increased use and this in turn results in compounding paranoia, psychosis and extreme mood swings. This in turn can lead to violence and violent offending such as serious assault and even homicide, especially when the intense craving for the drug often leads to repeated use for days on end, without sleep or food¹¹.

⁷ Above n 4. Australian Drug Foundation. 2002. “Drug Prevention Strategies: Drug Prevention in the Family” Fact Sheet. http://www.druginfo.adf.org.au/article.asp?ContentID=drug_prevention_in_the_family

⁸ Above n 4, Spooner C, Hall W and Lynskey M. 2001. “Structural Determinants of Youth Drug Use”. National Drug and Alcohol Research Centre. http://www.ncd.org.au/publications/pdf/rp2_youth_drug_use.pdf
Lane J, Gerstein D and Huang L. 2001. “Risk and Protective Factors for Adolescent Drug Use: Findings from the 1997 National Household Survey on Drug Abuse”. Department of Health and Human Services USA. http://oas.samhsa.gov/NHSDA/NAC97/Table_of_Contents.htm

⁹ <http://drugabuse.gov/NIDAHome.html>

¹⁰ Above, n 4

¹¹ <http://www.police.govt.nz/safety/meth.html>

Because drugs like methamphetamine are expensive, users often fund their addiction by resorting to crime. New Zealand Police have investigated an increasing number of homicides where the distribution, use or debts associated with methamphetamine have had a direct link to the crime¹².

Addiction

Drug abuse and dependence are recognised as primary, progressive, chronic, relapsing and treatable diseases, with clear diagnostic categories in the American Psychiatric Association' Diagnostic and Statistical Manual-Fourth Edition (DSM-IV) and with evidence-based treatment principles and protocols¹³. About half of those with schizophrenia are likely to have a co-occurring substance use disorder over their lifetime; with bipolar disorder, that likelihood increases even more so. People with major depression and panic disorders are likely to have co-occurring substance use disorders at the rates of nearly 30% and 22% respectively as compared with about 15% in the general population.

The World Health Organisation published a report titled "Neuroscience of Psychoactive Substance Use and Dependence" in 2004. The report summary presents the current state of knowledge from neuroscience research and underscores the following points.

- There is a need to increase public awareness regarding the complex nature of the problems and the biological processes underlying drug dependence.
- "...with recent advances in neuroscience, it is clear that substance dependence is a disorder of the brain as any other neurological or psychiatric illness."
- "Substance dependence is a chronic, relapsing disorder with a biological and genetic basis, and is not simply due to a lack of will or desire to quit."
- The greatest barrier to integrated treatment is the "silo" mentality - the fragmentation of mental health and substance use treatment services¹⁴.

Drug addiction and mental health

There is a strong link between substance abuse and mental health. Research shows that substance use, intoxication, harmful use, withdrawal and dependence may lead to or exacerbate psychiatric or psychological symptoms or syndromes¹⁵. Conversely, psychological morbidity and psychiatric disorder may lead to substance use, harmful use, and dependence (addiction). The most common associations for substance misuse are with depression, anxiety and schizophrenia, but eating, post traumatic stress, attention deficit, hyperactivity and memory disorders also occur¹⁶. Alcohol

¹² Above n 10

¹³ Mental Health America (previously known as the National Mental Health Association), Position Statement 33: Substance use, abuse, or dependence and co-occurring interactive disorders. Approved 6 October 2007; Marwick, CP and McLellan, AT (1996) "Myths About the Treatment of Addiction," *The Lancet*, p 347

¹⁴ Above n 12; New Freedom Commission on Mental Health, /Achieving the Promise: Transforming Mental Health Care in America./Final Report/. DHHS Pub. No. SMA-03-3832. Rockville, MD: 2003.

¹⁵ Crome, I et al, SCIE Research briefing 30: The relationship between dual diagnosis: substance misuse and dealing with mental health issues. January 2009, <http://www.scie.org.uk/publications/briefings/briefing30/> Crome I. B. (2006) An epidemiological perspective of psychiatric co morbidity and substance misuse: The UK experience/example, in Baldacchino, A. and Corkery, J. (Eds.) *Co morbidity: Perspectives Across Europe (ECCAS Monograph No. 4)* pp.45–60.

¹⁶ Above n 14, Advisory Council on the Misuse of Drugs (2008) *Cannabis: Classification and Public Health*, London, Home Office; Arendt, M. (2005) Cannabis-induced psychosis and subsequent schizophrenia spectrum disorders: follow-up study of 535 incident cases, *British Journal of Psychiatry*, 18, 6, pp.510–515. Bott, K., Meyer, C., Rumpf, H-J., Hapke, U., and John, U. (2005) Psychiatric disorders among at-risk consumers of alcohol in the general population, *Journal of Studies on Alcohol*, 66 (March), pp.246–253. Cantwell, R. and Scottish Co

problems, for example, are often seen with bipolar disorders, schizophrenia, and personality disorders¹⁷, while concurrent use of other illicit substances is well recognised in opiate dependence. Cocaine users too, who may supplement their use with alcohol, may also have affective disorders and personality disorders.

Drug addiction and suicide

Unsurprisingly given the link to mental health issues, drug use disorders have also been found to be strongly related to suicide risk¹⁸. Individuals with a substance use disorder (i.e. either a diagnosis of abuse or dependence on alcohol or drugs) are almost six times more likely to report a lifetime suicide attempt than those without a substance use disorder¹⁹. Numerous studies of individuals in drug and alcohol treatment show that past suicide attempts and current suicidal thoughts are common.

There are two possible ways drug use is thought to increase the chances of a person becoming suicidal.

- The biological and psychological effects of the abuse of substances can lead to short term suicide risk. The risk varies according to the chemicals components of the substance. Long-term substance abuse can lead to social issues such as financial stress, criminality, physical ill health or family breakdown, resulting in distress and social exclusion and thus suicide risk.
- Social disadvantage, childhood adversities, personal traumas and mental illness contribute to a risk for both substance abuse and suicide concurrently²⁰.

Emerging research suggests that some individuals with particular types of substance use and abuse may be more likely to engage in suicidal behaviours. For example, individuals who use opiates, cocaine, and sedatives may have a noticeably higher risk of suicide than those who use other drugs²¹. Co-occurring alcohol and drug use disorders may be particularly strong indicators of

morbidity Study Group. (2003) Substance use and schizophrenia: effects on symptoms, social functioning and service use, *British Journal of Psychiatry* 182, pp.324–329.

¹⁷ Above n 14, Moran, P. (2006) Personality and substance use disorders in young adults. *British Journal of Psychiatry*, 188, 4, pp.374–379.

¹⁸ Ilgen, M and Kleinberg, F The Link between Substance Abuse, Violence, and Suicide, Implications and Interventions. *The Psychiatric Times*, January 2011

<http://www.psychiatrictimes.com/suicide/content/article/10168/1780669> : Harris EC, Barraclough B. Suicide as an outcome for mental disorders. A meta-analysis. *Br J Psychiatry*. 1997;170:205-228. Wilcox HC, Conner KR, Caine ED. Association of alcohol and drug use disorders and completed suicide: an empirical review of cohort studies. *Drug Alcohol Depend*. 2004;76 (suppl):S11-S19.

¹⁹ Above n 17: Kessler RC, Borges G, Walters EE. Prevalence of and risk factors for lifetime suicide attempts in the National Co morbidity Survey. *Arch Gen Psychiatry*. 1999;56:617-626

²⁰ Suicide Prevention Australia. Position Statement, Alcohol, Drugs and Suicide Prevention, June 2011

²¹ Above n 17: Ilgen MA, Harris AH, Moos RH, Tiet QQ. Predictors of a suicide attempt one year after entry into substance use disorder treatment. *Alcohol Clin Exp Res*. 2007;31:635-642. Maloney E, Degenhardt L, Darke S, et al. Suicidal behaviour and associated risk factors among opioid-dependent individuals: a case-control study. *Addiction*. 2007;102:1933-1941. Darke S, Ross J, Lynskey M, Teesson M. Attempted suicide among entrants to three treatment modalities for heroin dependence in the Australian Treatment Outcome Study (ATOS): prevalence and risk factors [published correction appears in *Drug Alcohol Depend*. 2004;73:315]. *Drug Alcohol Depend*. 2004;73:1-10. Wines JD Jr, Saitz R, Horton NJ, et al. Suicidal behaviour, drug use and depressive symptoms after detoxification: a 2-year prospective study. *Drug Alcohol Depend*. 2004;76(suppl):S21-S29

increased risk of suicide²². Thus, the severity of substance use disorders (i.e. a greater number of substances or misuse of more than one substance) may predict a greater likelihood of suicide.

Treatment

As the Law Commission recently noted in its review of the Misuse of Drugs Act 1975²³ drug use is often depicted across a continuum from no use through to severe dependence. This in turn means that there is a need for a broad range of drug treatment services that meet the differing levels of need for intervention efficiently. Intensive residential programmes are expensive to deliver but are needed for a small number of users. Intensive out-patient programmes, such as day programmes suit the majority of people with drug problems.

The Law Commission also noted in its review that submissions to it on this issue had advised that:

- an overall addiction treatment strategy is needed
- services are fragmented – there is a lack of an effective structure for delivering treatment, both in the criminal justice sector and more generally for the rest of the population
- specialist services for specific population groups, including Māori, Pacific people and Asian people in some regions are needed
- there are gaps in specialist services available for youth
- a better geographical spread of services is needed
- greater cooperation is needed between the criminal justice system and alcohol and drug services to make the best possible use of opportunities for delivering treatment through the justice sector²⁴.

The NZMA agrees that the above list is a reasonable summation of the issues surrounding treatment.

Moreover, research done in the United States of America shows that addiction treatment can be both successful and cost effective. Mental Health America noted in its position statement that the conclusion that addiction treatment is effective is found in over 600 published scientific studies, and that the benefits outweigh the costs significantly²⁵.

Because illegal drug use is never likely to be completely eradicated the NZMA considers that a harm reduction approach should be taken in respect of those individuals who are unlikely to ever be drug free. The focus of harm reduction policies and programmes would be the reduction of harmful consequences of substance use without necessarily requiring any reduction in use. These harms may be related to health, social, or economic factors that affect the individual, community and society as a whole.

²² Above n 17: Preuss UW, Schuckit MA, Smith TL, et al. Comparison of 3190 alcohol-dependent individuals with and without suicide attempts. *Alcohol Clin Exp Res.* 2002;26:471-477.

²³ Law Commission, *Controlling and Regulating Drugs; A review of the Misuse of Drugs Act 1975*. Report no 122. April 2011 http://www.lawcom.govt.nz/sites/default/files/publications/2011/05/part_2_-_report_controlling_and_regulating_drugs.pdf.

²⁴ Above n 22.

²⁵ Mental Health America, *Position Statement 33: Substance Use, Abuse, or Dependence and Co-Occurring Interactive Disorders* <http://www.nmha.org/go/position-statements/33> : Marwick, CP and McLellan, AT (1996) "Myths About the Treatment of Addiction," *The Lancet*, p 347

Government intervention

Given the effects illicit drugs have on people and the overall cost of treatment that is borne by the public health system, the government takes steps to enforce the laws regarding illicit drugs. In April 2011 the Law Commission produced its review of the Misuse of Drugs Act 1975²⁶ (“the Act”) and made 144 recommendations. Among these were the following recommendations.

- The Act should be repealed and replaced with new legislation which is to be administered by the Ministry of Health.
- A mandatory cautioning scheme is established for personal use and possession (note it is proposed that the scheme not be available to youth offenders who are dealt with through the youth justice system).
- The limitation periods in the Act are abolished so that drug offences are subject to the same limitation periods as other criminal offences.
- The profit forfeiture regime in the Act is retained to enable the forfeiture of any dealing proceeds.
- A statutory requirement is created that, following a conviction for any drug offence, a judge must order the forfeiture and destruction of any unlawful items to which the conviction relates.
- A separate funding stream is set up through the justice sector for the treatment of offenders with alcohol and drug problems.
- Subject to further analysis of the cost effectiveness and availability of funding, the government should consider establishing a drug pilot court.

These all seem sensible and the NZMA supports the recommendations.

Pill testing at festivals

Pill testing allows people to anonymously submit samples of illegal drugs for forensic analysis, and provides individualised feedback of results and counselling as appropriate. The NZMA believes that there is sufficient evidence to justify the introduction of carefully designed pill testing trials at festivals as a harm reduction strategy.²⁷ Importantly, when people are told their pills contain substances that are other than what had been intended to be purchased, a considerable proportion choose not to take the pill. The research also suggests that drug users who use testing services do

²⁶ Above n 22

²⁷ Measham FC. Drug safety testing, disposals and dealing in an English field: Exploring the operational and behavioural outcomes of the UK's first onsite 'drug checking' service. *Int J Drug Policy*. 2018 Nov 28. pii: S0955-3959(18)30275-5; Makkai T, et al. Report on Canberra GTM Harm Reduction Service, 2018, Harm Reduction Australia; Johnston J, et al. A survey of regular ecstasy users' knowledge and practices around determining pill content and purity: implications for policy and practice. *Int J Drug Policy*. 2006;17(6)464-72; Barratt MJ, et al. Global review of drug checking services operating in 2017. *Drug Policy Modelling Program Bulletin*, 2018, No. 24. Sydney, Australia: National Drug and Alcohol Research Centre, UNSW Sydney; Barratt MJ, Pill testing or drug checking in Australia: Acceptability of service design features. *Drug and Alcohol Review*; 2018;37(2):226-236

not use more drugs than those who do not. Pill testing also provides public health authorities with data on substances in the drug market.